



1.0 General

1.1 Scope

A. Standards for manufacturing, machining, finishing and installation of fiberglass doors unless more specifically described under other section(s).

1.2 Related work in other sections

- A. Section 06200: Carpentry
- B. Section 06420: Architectural Paneling
- C. Section 08700: Finish Hardware
- D. Section 08800: Glass and Glazing
- E. Section 09900: Painting

1.3 Quality Assurances

A. Provide doors meeting or exceeding the minimum standards as set forth by the following organizations unless standards are modified or exceeded by this specification:

- 1. Composite Fabricators Association (CFA)
- 2. Composites Institute
- 3. National Accreditation & Management Institute, Inc. (NAMI)

B. All doors shall be the products of the same manufacturer to insure uniformity of quality and appearance throughout the project.

C. The top of each door shall bear a quality assurance label from the manufacturer indicating the door handing and order number.

D. The door manufacturer shall provide a Certification of Compliance with this specification signed by an authorized company representative to the architect or owner at their discretion.

1.4 Submittals

A. Shop Drawings

Submit schedules and elevations indicating door sizes, construction, swing, undercut and applicable hardware locations.

**B. Product Information**

Submit manufacturer's product description showing compliance with specifications, finishing instructions, installation instructions, and any general recommendations the manufacturer may have for the care and maintenance of each door type.

**1.5 Coordination**

Contractor shall be responsible for coordination and acquiring of all necessary information from hardware manufacturers. Door supplier shall be responsible for coordinating all necessary information received by contractor from hardware manufacturers, to facilitate door preparation for hardware installation. Contractor shall provide door supplier with two copies of hardware schedule and all necessary hardware templates. All of the above information shall be in possession of door supplier 120 days prior to desired delivery date of doors.

**1.6 Delivery, Storage and Handling**

- A. No doors shall be delivered to the building until weatherproof storage space is available. Stack doors flat and off the floor. Protect doors from damage at all times.
- B. Factory finished doors shall be individually wrapped in plastic bags to protect the finish from damage by contact with other doors.
- C. Do not walk or place other material on top of stacked doors. Do not drag doors across one another.
- D. Installer shall use all means necessary to protect doors from damage prior to, during and after installation. All damaged doors shall be repaired or replaced by contractor at no cost to owner.
- E. Doors may be palletized at the factory in stacks of no more than 30 doors per pallet. All doors and frames will be fully crated with plywood protection all sides of the pallet.

**1.7 Warranty**

- A. All work in this Section shall be warranted (from the date of shipment) against defect in materials including the following:
  - 1. Delamination in any degree.
  - 2. Warp or twist of 1/4" or more in any 3'0" x 7'0" door.
  - 3. Telegraphing of any core assembly through face to cause surface variation of 1/100" or more in a 3" span.

4. Any defect that may, in any way, impair or affect performance of the door for the purpose of which it is intended.

B. Warranty Period: FRP Rugged Series doors and frames are guaranteed for the life of the product against corrosion induced failure and for a period of ten (10) calendar years after the date of purchase against defects.

C. Doors must be stored, finished, hung and maintained per manufacturer's recommendations set forth in their warranty coverage.

## 2.0 Product

### 2.1 Manufacturers

Listed manufacturers are believed to conform to the criteria stated for material quality standards, function and appearance. Manufacturers are still subject to meeting the requirements of this specification. Non-conforming substitutions shall not be accepted.

- A. Oregon Door—FRP Rugged Series product line
- B. Oshkosh Door Company—Cor-Guard product line
- C. Corrim

### 2.2 Materials and Components

A. FRP Door Cores: **Select from below options**

- FRP-S (Polystyrene minimum 2 lb density)
- FRP-E (Structural Composite Lumber core)
- FRP-H (Hurricane approved polystyrene core)
- FRP-F (45-90 min fire rated core)

B. Stiles and Rails: Stiles and rails shall be constructed of solid polymers securely bonded to the core material and then abrasively planed as a unit to eliminate telegraphing issues related to uneven core materials. Tubular stiles and rails or systems incorporating metal reinforcements for the attachment of hardware will not be accepted. Bottom rails shall be a minimum of 2" prior to factory trim to allow for field trimming if required. When styrene or fire rated cores are used the top rail shall be a minimum of 6 ½" prior to factory trim.

C. Blocking: All doors shall have solid polymer blocking where located wherever locks, exit devices etc. penetrate the core. Blocking shall be large enough to accommodate the entire hardware prep.

D. Door Face Skins: Door face skins shall consist of a Fiberglass Laminate manufactured by the Resin Transfer Molding (RTM) process. Skin thickness shall be 0.090 inches.

1. Face sheet reinforcements shall be either type "A" or "C" glass.
2. Door faces shall be:

Select one of the following:

- Smooth prepped with primer for field finish
- Smooth painted finish with one of manufacturer's standard colors
- Smooth painted finish custom matched to color selected by the architect
- Pebble face with color selected from manufacturer's standard colors

E. Vision Kits and Louvers: These accessories shall be furnished by door supplier and made from solid polymers. Fire rated vision kits may be made of metal and will be supplied with fire rated glass. Louvers and vision kits to be installed by the manufacturer. Vision kits to be installed complete with glass.

Select one of the following

- Vision kit with ¼ in tempered glass
- Vision kits with 1" insulated glass

F. Frames: All frames shall be FRP pultruded material with an integral stop for the door. Corners of the frames shall be mitered at a 45 degree angle for both knock down and welded applications.

Select one of the following

- All frames to be knock down for field assembly
- All frames to be factory chemically welded together

Frames to be painted the same color as selected for the doors.

Galvanized hollow metal frames will be allowed for use at fire rated openings.

### 3.0 Execution

3.1 Fabrication: Fabricate all doors and accessories in strict accordance with this specification and door manufacturer's manufacturing specifications.

3.2 Machining and Fitting: All fiberglass doors shall be machined by the manufacturer or authorized manufacturer for cutouts, hinges, locks, closures and all hardware requiring routing and mortising. Doors shall be sized to allow 0.125 inches of clearance at top and each side and 5/8 inch clearance at bottom (unless specified otherwise).

**3.3 Installation of Hardware**

- A. Contractor shall install hardware according to approved hardware schedule for proper locations.
- B. Install with full threaded screw furnished by hardware manufacturer.
- C. Drill proper size pilot holes for all screws.
- D. Securely anchor hardware in correct position and proper alignment.
- E. Adjust hardware and door for proper function and smooth operation, proper latching, without force or excessive clearance.

END OF SECTION 08220

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